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REMARKS

Claims 1-26 are pending and no claims have been amended or cancelled. Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

Claim Rejections Under 35 U.S.C. § 102(b) or (e)

Claims 1-11, 23, 24, 25 and 26 stand rejected under 35 U.S.C. § 102(b) or (e), as allegedly anticipated by U. S. Patent No. 6,315,868 ('868) and U. S. Patent No. 5,426,207 ('207). Applicants respectfully traverse this rejection.

'868 discloses a method of separating dimethyl carbonate and methanol in a single distillation column using extractive distillation process. As understood by a person skilled in the art, an extractive distillation process is defined as a distillation process where a high boiling solvent is used to alter relative volatilities of components in the main feed to a distillation column. '868 discloses an extractive distillation process, which is conducted in presence of extractive distillation agent that modifies the azeotropic behavior of the dimethyl carbonate/methanol mixture (col. 1, line 6). The extractive distillation agent is selected from a group consisting of an aromatic hydroxy compound, an alkyl aryl ether, a dialkyl carbonate, an alkyl aryl carbonate, an alkylene carbonate and an alicyclic alcohol. (col. 2, line 5). Therefore as disclosed in '868, alkyl aryl ether is used merely as an extractive distillation agent. '868 does not disclose production of alkyl aryl ether, merely its use.

To anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988). '868 does not disclose the production of alkyl aryl ether and hence cannot anticipate the pending claims.

'207 discloses a process for the production of diaryl carbonate, such as diphenyl carbonate, which is produced using a primary, secondary and tertiary reaction zones. Fig. 1 illustrates a plant for the production of diphenyl carbonate from phenol and dimethyl carbonate by reaction in the presence of a transesterification catalyst, such as a titanium tetra-alkoxide (col. 8, line 64). This reference further discloses a methanol recovery section (col. 10 line 19), a product recovery column (col. 12, line 16) and a separator 131 (col. 12, line 29). Separator 131 separates

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the reactants for the diphenyl carbonate production from the anisole and diphenyl ether. The anisole and diphenyl ether are disposed through line 132 (col. 12, lines 30-32). Thus clearly '207 teaches the disposal of alkyl aryl ether, not the production and collection of it. Furthermore examples 1-4 describe a simple set up to illustrate the transesterification reaction of phenol and dimethyl carbonate to produce diphenyl carbonate. Both the liquid and the vapor products in each of these examples contains very insignificant amount of anisole as shown in examples 1-4. Therefore, '207 does not disclose any method for producing substantially pure alkyl aryl ether as is instantly claimed. In view of the above arguments, claims 1-11, 23, 24, 25 and 26 are not anticipated by either U. S Patent No. 6,315,868 or U. S. Patent No. 5,426,207.

Claim Rejections Under 35 U.S.C. § 102(e)

Claims 1-11, 12-21, 23, 24, 25, and 26 stand rejected under 35 U.S.C. § 102(e), as allegedly anticipated by US 2001/0021786. Applicants respectfully traverse this rejection.

US 2001/0021786 discloses a method for continuous production of diaryl carbonates by reaction of a dialkyl carbonate and an aromatic alcohol in the presence of a transesterification catalyst comprising the steps of: (a) introducing reactant streams containing dialkyl carbonate, aromatic alcohol and transesterification catalyst to a first reactive distillation column to produce alkyl aryl carbonate and alkyl alcohol; (b) recovering from the first reactive distillation column a first top stream containing dialkyl carbonate and alkyl alcohol and a first bottom stream containing alkyl aryl carbonate; (c) introducing the first bottom stream into a second reactive distillation column to produce diaryl carbonate by disproportionation of the alkyl aryl carbonate; (d) recovering from the second reactive distillation column a first side stream containing dialkyl carbonate and alkyl aryl ether and a second bottom stream containing diaryl carbonate, alkyl aryl carbonate and dialkyl carbonate; (e) introducing the first side stream into a second rectification column to separate a dialkyl carbonate stream from the alkyl aryl ether, and recycling the dialkyl carbonate stream to the first rectification column; (f) introducing the second bottom stream to a third reactive distillation column to further drive the reaction toward diaryl carbonate; (g) recovering from the third reactive distillation column a second top stream containing unreacted aromatic alcohol, dialkyl carbonate and alkyl aryl ether and recycling the second top stream to the

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first reactive distillation column; (h) introducing the first top stream into a first rectification column; (i) recovering from the first rectification column an azeotrope top stream consisting essentially of dialkyl carbonate/alkyl alcohol azeotrope and a third bottom stream containing dialkyl carbonate, and recycling the third bottom stream to the first reactive distillation column; and (j) recovering a product stream containing essentially all of the diaryl carbonate produced from the bottom of the third reactive distillation column.

In the pending application, in contrast to steps (d) and (e) of the disclosed method in US 2001/0021786, the feed for the rectification column 146 is recovered from the first distillation column 110 (Fig. 1 and 2 of present application). Substantially pure alkyl aryl ether is recovered from rectification column 146. Substantially pure is defined as having a purity of at least about 95% by weight of alkyl aryl ether (paragraph 10, page 3 of present application). The advantages of taking the feed for the rectification column 146 from the first reactive distillation column 110 are clearly mentioned in paragraph 12 of the present application. In view of this fundamental difference in the process of producing alkyl aryl ether, the process and apparatus claimed in claims 1-11, 12-21, 23,24, 25, and 26 is not anticipated by U.S 2001/0021786.

It is believed that the foregoing remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

Respectfully submitted,

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